

CITY OF LINCOLN

Development Services Department 600 Sixth Street Lincoln, CA 95648

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APPLICATION CHECKLIST FOR SOLAR PANEL INSTALLATIONS

Requirements for Permit Submittal

Before approval and issuance of a permit for a Solar Panel/Photovoltaic System can be issued the applicant shall provide three (3) sets of plans for Residential solar arrays drawn on a minimum size of 11×17 plan paper and the designers name with signature. Commercial solar arrays will be required to provide five (5) plan sets for drawn to scale and are fully dimensioned, readable, legible, and include the following information with the designer name and Engineer of Records wet stamp and signature:

Cover Sheet

- 1. Project address;
- 2. Current California 2016 Code Design Criteria
- 3. Owner's name, address, phone number;
- 4. Name, address and phone number of the person preparing the plans;
- 5. Scope of work statement;
- 6. Sheet index indicating each sheet title and number;
- 7. Legend for symbols, abbreviations and notations used in the plans.

Other Information required on the additional Plan Sheets

- 1. Provide a simple plot plan showing:
 - (a) property line locations,
 - (b) approximate location of all structures with a directional North Arrow,
 - (c) the location(s) of the panel installations with Code compliant Fire Pathways,
 - (d) The main service location.
 - (e) Specify the locations of all equipment and disconnects (i.e., located on exterior face of west wall of house and clarify any interior locations of equipment)
- 2. Provide a roof plan showing:
 - (a) Ridges, hips and valleys
 - (b) Show Fire Pathways per the 2016 CFC or the California Fire Marshall Guidelines.
 - (c) Show points of roof mount connections Show percentage of coverage of the roof area.
 - If more than 50% a review by the fire department is required.
- 3. Provide a plan page with framing cross-sections showing roof slope, size, spacing, span and direction of existing rafters. **Note:** If rafters are over-spanned, provide framing details for proposed strengthening. An additional permit will be required for any structural framing. If the roof structure is manufactured trusses show the truss webs and truss materials.

- 4. State the system KW rating.
- 5. Is the system a utility interactive or stand-alone system?
- 6. Is this an uninterrupted power supply (UPS) system? (i.e., battery back-up) Yes__ No__
 - (a) If yes, give the number, size and location of the batteries on the plans. If ground mounted provide details for foundation.
 - (b) If panels are rooftop mounted, show the existing roofing material. If rooftop mounted, how many layers and what types of existing roof covering do you have under the panels?
- 7. Indicate the style, diameter, length of embedment of bolts or other approved fastener (Example, 5/16" lags with minimum 3" embedment.)
 - (a) Indicate the number of bolts, lags or other approved method of attachment per panel. **Note:** depending on your manufacture's specifications attachment methods may vary.
- 8. Provide a single line drawing of the electrical installation which includes the following:
 - (a) PV panel layout
 - (b) PV power source short circuit current rating
 - (c) Conductor size
 - (d) Conductor type
 - (e) Conductor locations and lengths of runs
 - (f) Wiring methods
 - (g) Grounding points
 - (h) Inverter location
 - (i) Disconnect location(s)
 - (j) Battery locations (if applicable)
 - (k) Point of connect to the existing electrical service
 - (1) Size and number of main electrical service
- 9. Provide the manufacture's specification sheets on all components including but not limited To inverters, panels and mounting system which is to include the make, model, listing, size, weight, etc.

Fire Protection Markings

- (a) Show location of all "marking" (signage) for alternate power systems; materials used for marking shall be UL Listed per UL 969 as standard weather rating. markings shall be in the following locations:
- (b) Markings of the <u>Main Service Disconnect</u> shall be made on the exterior of the main disconnect. The marking shall read; "CAUTION: SOLAR ELECTRIC SYSTEM CONNECTED" The marking format shall follow the California Fire Marshalls guidelines and the CEC Art. 110.26(b) code sections for labeling and are as follows:
 - Red Background / White Lettering
 - All capital letters / Minimum 3/8" letter height / Arial or similar font, non-bold
 - Reflective, weather resistant material suitable for the environment